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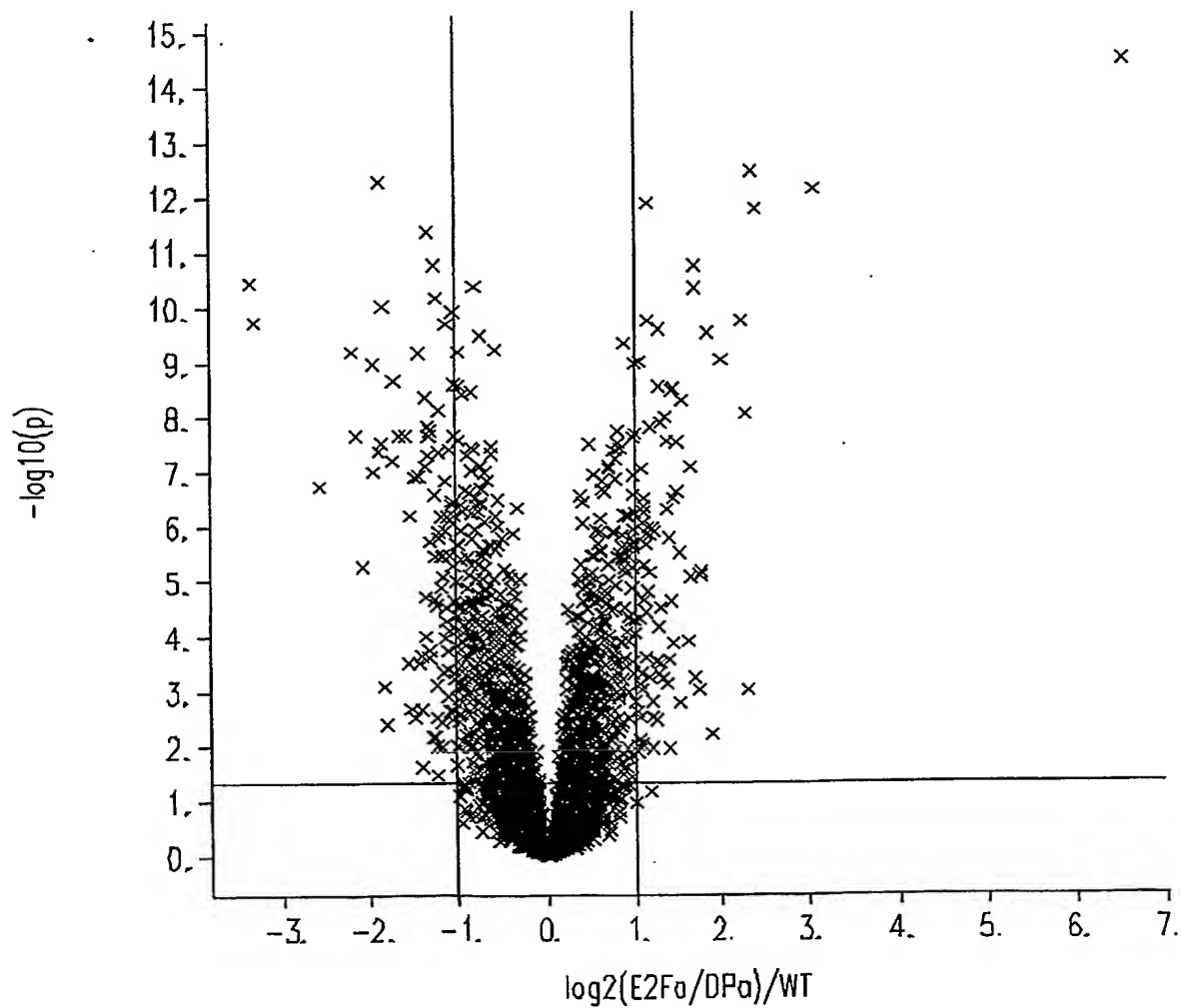


FIGURE 1

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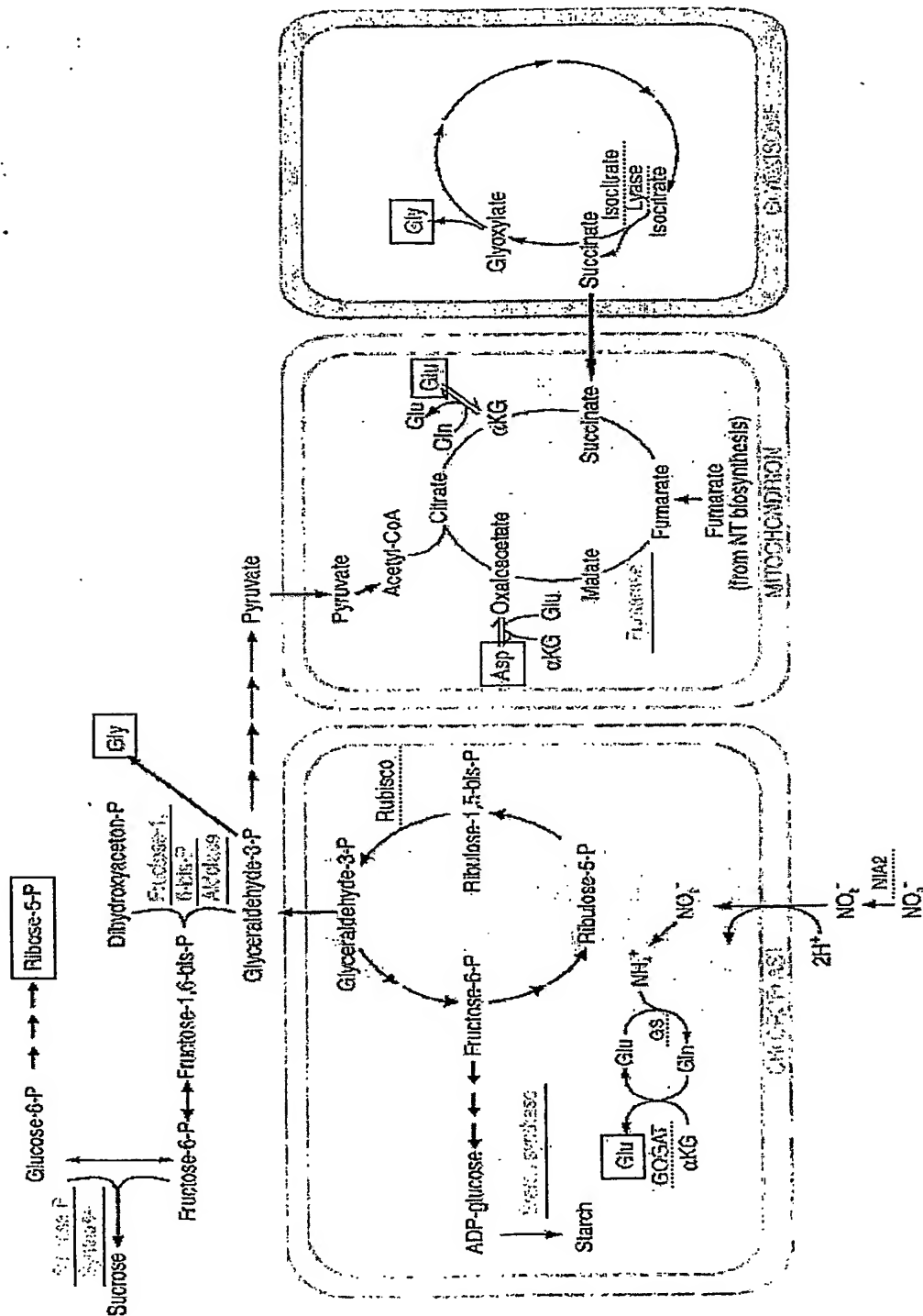
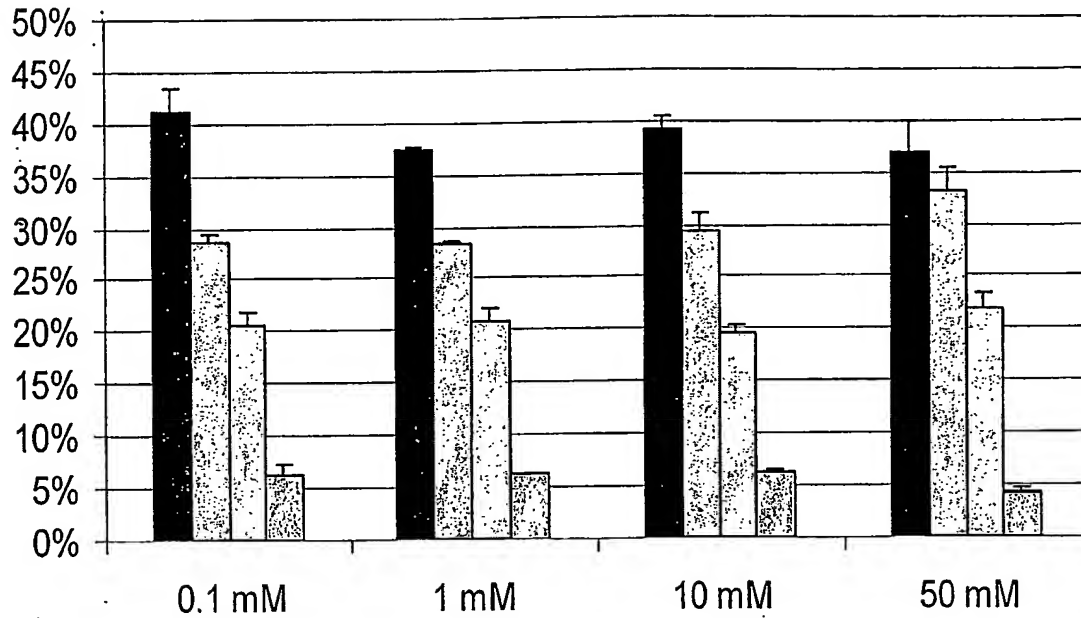
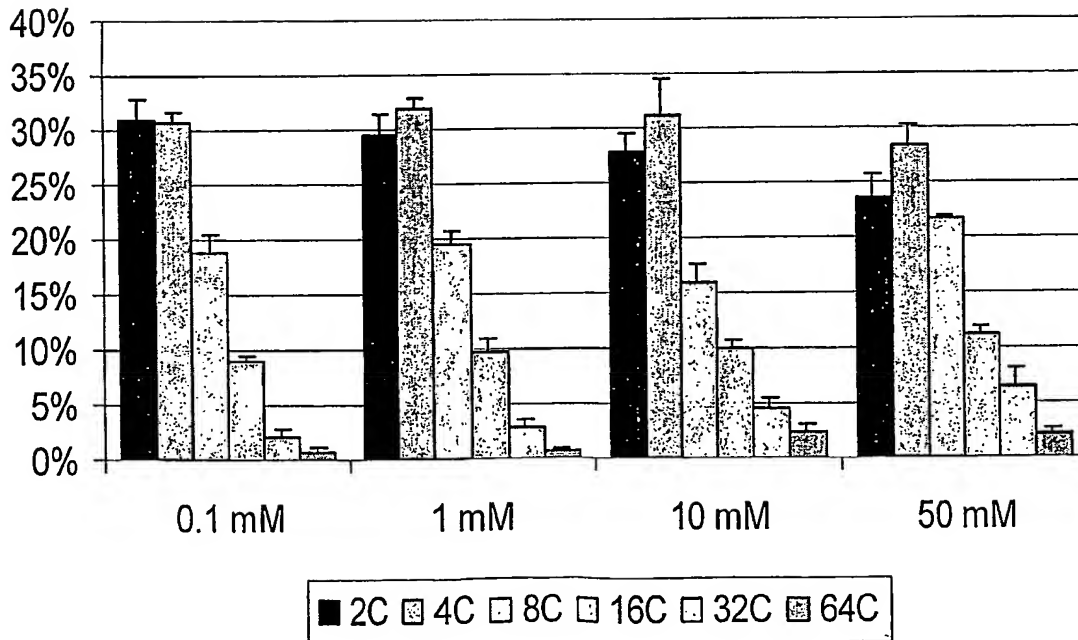


FIGURE 2

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A**B****FIGURE 3**

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MATDB - entry At1g57680 from contig t8l23

http://mips.gsf.de/cgi-bin/proj/thal/gv_report?18l23+At1g57680**MATDB - entry At1g57680 from contig t8l23**

mips

(Chromosome 1 / BAC clone T8L23 / sequence database accession [EMBL:AC079739](#))

Type: gene/protein
Code: At1g57680
Old code: T8L23_15
Title: putative protein
Contig: t8l23
Position: 53392-54480 (C)

Notes**Classification**

- known protein

Functional Category

- UNCLASSIFIED PROTEINS

TargetP prediction

- Targeted to secretory pathway
- TargetP score: 0.968
- TargetP reliability class: 2
- Probable signal sequence length: -

TMHMM transmembrane prediction

- Very likely to be a transmembrane protein (or have a signal peptide) (Exp number of AA in TMHs: 110)
- A transmembrane region could actually be a signal peptide (Exp number, first 60 AAs: 21)
- Orientation of N-terminal: external side (probability: 0.9)
- Transmembrane regions:
 - 40-62
 - 83-100
 - 138-160
 - 181-203
 - 213-235

EMBL

- [AY072149](#)

mRNA matches: 1 found**Arabidopsis ESTs**

- found 10
[AA585779](#); [AI992654](#); [AI998042](#); [AV518701](#); [AV538415](#); [AV538372](#);
[AV541088](#); [AV550688](#); [AV550640](#); [AV554579](#);

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MATDB - entry At1g57680 from contig t8l23

http://mips.gsf.de/cgi-bin/proj/thal/gv_report?t8l23+At1g57680**Full report**

- Full report includes FST matches and external annotation... slow.

Protein properties

PEDANT and Interpro data are being recalculated. To access old PEDANT data, use the link in the left frame, but be aware that some protein sequences have been changed due to update of gene models based on cDNA data and PEDANT data may be outdated.

[Click here](#) to submit new information about this entry

FIGURE 4 (contin.)

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A. thaliana - contig t8123 - entry At1g57680

http://mips.gsf.de/cgi-bin/proj/thal/get_pep?t8123/At1g57680

A. thaliana - contig t8123 - entry At1g57680

mips

>P1;At1g57680
putative protein
MPLTKLVDA FGVVTCILVA LLVLLGLLCI AYSFYFQSHV RKQGYIQLGY FSGPWIIIRIT
FILFAIWWAV GEIFRLSLLR RHRRLSGLD LRWQENVCKW YIVSNLGFPE PCLFLTMFL
LRAPLKMESG ALSGKWRDT AGYIILYCLP MLALQLAVVL SESRLNGGSG SYVKLPDFT
RTYSRVIIDH DEVALCTYPL LSTILLGVFA AVLTAYLFWL GRQILKLVIN KRLQKRVYTL
IFSVSSFLPL RIVMLCLSVL TAADKIIFEA LSFLAFLSLF CFCVVSICLL VYFPVSDSMA
LRGLRDTTDE DTAVTEERSG ALLLAPNSSQ TDEGLSLRGR RDSGSSTQER YVELSLFLEA
EN*
C; Length 362 aa
C; Sequence At1g57680 was extracted from t8123
C; Fragment (54480-53392(C))

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A. thaliana - contig t8l23 - coordinates: 53392-54480 (C)

http://mlps.gsf.de/cgl-bin/proj/thal/get_dna.pl?l8l23/C/53392-54480

A. thaliana - contig t8l23 - coordinates: 53392-54480 (C)

mlps

```
1  ATGCCCCTGA  CAAAATTAGT  TCCCGATGCA  TTCGGCGTTG  TGACGATATG  TCTAGTCGCT
61  CTGCTAGTTC  TTTTGGGTCT  CCTTTGCATC  GCTTACTCGT  TCTATTTCCA  GTCTCACGTT
121  CGTAAGCAAG  GCTATATTCA  ACITGGTTAC  TTCAGTGGTC  CCTGGATTAT  CCGAATCACT
181  TTCATTCTCT  TTGCTATCTG  GTGGGCTGTT  GGTGAGATTT  TTCGATTGAG  TTTGTTGAGG
241  CGTCACAGAA  GGTGTGTGAG  TGGGTTGGAT  CTGAGATGGC  AAGAAAACGT  TTGCAAGTGG
301  TACATCGTTT  CCAATCTAGG  ATTTGCCGAG  CCTTGTCCT  TTCTGACTCT  CATGTTTCTT
361  CTGCGTGTCT  CCTTGAAGAT  GGAATCAGGG  GCTTTGAGCG  GAAAATGGAA  CAGGGACACA
421  GCAGGTTATA  TTATTCTTTA  TTGTCTCCCG  ATGCTTGCTC  TTCAACTTGC  GGTGTGTG
481  TCCGAGTCAC  GCCTAAATGG  TGGTAGTGCC  TCTTATGTAA  AGCTGCCACA  CGACTTCACA
541  AGAACGTATT  CCGAGTTTAT  TATTGATCAC  GACGAGGTGG  CCTTATGCAC  ATATCCTCTA
601  CTGAGTACCA  TCCTTCTTGG  TGTGTTTGCA  GCCGTCTTAA  CAGCTTACCT  GTTCTGGCTT
661  GGAAGGCAGA  TACTGAAACT  TGTCAATTAAC  AAGCGTTTAC  AGAAGAGAGT  ATACACTTGT
721  ATATTCTCGG  TCTCGAGTTT  CCTCCATTA  AGGATTGTTA  TGCTCTGTTT  GTCGGTCTCT
781  ACAGCAGCAG  ACAAGATTAT  ATTCGAAGCC  CTTCCTTCT  TGGCCTTCT  CTCCTCTCTC
841  TGCTTTTGGG  TGGTATCCAT  CTGCTTGCTT  GTCTACTTCC  CGGTTTCAGA  TTCCATGGCC
901  CTGAGAGGTC  TAAGAGACAC  AGATGATGAG  GATACGGCTG  TGACCGAAGA  ACGCAGTGGT
961  GCTCTGTATC  TTGCACCAA  CTCTTCACAA  ACTGATGAGG  GATTGAGCTT  AAGAGGTCGG
1021  AGAGACTCGG  GATCGTCTAC  ACAGGAGAGG  TATGTGGAAC  TCAGCCTATT  TCTGGAAGCT
1081  GAGAACTAA
```

FIGURE 4 (contin.)

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A. thaliana - contig t8l23 - coordinates: 53392-54480 (C)

http://mlps.gsf.de/cgi-bin/proj/th..._gendna.pl?l8l23/C/53392-54480/500

A. thaliana - contig t8l23 - coordinates: 53392-54480 (C)

mlps

```

1  gtattatctt  ttgagattct  gtgttttaag  gttatgactt  ggctttatgt  atttcaatat
61  tgttattgat  ttgtgtgrra  atcatcttaa  tcttcaaggt  tgctttagtt  ttgagsaagg
121  ttatgacttt  ttaagatcta  ygggttaagat  ggtttgatag  gtctttgttt  caaatttttg
181  gtatatattg  taagtttttg  attatttgtt  gttttgttta  gtttatgtag  gtaacacgca
241  tatcaagtgt  taaagagtca  agatcacaaa  aagttctatc  ggggtgatct  ggctgctttc
301  ttttgttaac  taattgcaga  aactttgctc  tgacttggat  agcttcgtaa  aaggttcaat
361  ctttctccgt  ttttcatcaa  tgagtagtaa  ataactctga  aatttggttg  yagayaaagg
421  gcacattgca  ctgctattgc  tagagaacgt  ttctgcaccc  atgctggtag  agagcatgcg
481  tggatactgt  gttttgggtg  ATGCCCTGA  CAAATTAGT  TCCGATGCA  TTCGGCTTG
541  TGACGATATG  TCTAGTCGCT  CTGCTAGTTC  TTTTGGGCT  CCTTGCATC  GCTTACTCGT
601  TCTATTTCCT  GTCTCAGCT  CGTAAGCAAG  GCTATATICA  ACTTGGTTAC  TTCAGTGGTC
661  CCTGGATTAT  CCGAATCACT  TTCATTCTCT  TTGCTATCTG  GTGGGCTGTT  GGTGAGATT
721  TTCGATTGAG  TTGTGTGAG  CGTCACAGAA  GGTGTGTGAG  TGGGTGGAT  CTGAGATGSC
781  AAGAAAAAGT  TTGCAAGTGG  TACATCGTTT  CCAATCTAGG  ATTGCGGAG  CCTTGTCTCT
841  TTCTGACTCT  CATGTTCTT  CTGCGTGCTC  CCTGAAGAT  GGAATCAGGG  GCTTGTAGCG
901  GAAAAAGGAA  CAGGGACACA  GCAGGTATA  TTATCTTTA  TTGTCTCCCG  ATGCTTGCTC
961  TTCAACTTGC  GGTGTGTG  TCCGAGTCAC  GCCTAAATGG  TGGTAGTGGC  TCTTATGTAA
1021  AGCTGCCACA  CGACTICACA  AGAACGTATT  CCCAGTTAT  TATTGATCAC  GACGAGGTGG
1081  CCTTATGCAC  ATATCTCTTA  CTGAGTACCA  TCCTCTTGG  TGTGTTGCA  GCCGTCTTAA
1141  CAGCTTACTT  GTTCTGGCTT  GGAAGGCAGA  TACTGAACT  TGTATTAA  AAGCGTTTAC
1201  AGAAGAGAGT  ATACACTTGG  ATATTCTCGG  TCTCGAGTTT  CCTTCCATTA  AGGATTGTTA
1261  TGCTCTGTTT  GTCGGTCTC  ACAGCAGCAG  ACAAGATTAT  ATTGGAAGCC  CTTTCTTTCT
1321  TGGCCTTCCT  CTCCCTCTTC  TGCTTTTGG  TGGTATCCAT  CTGCTTGCTT  GTCTACTTCC
1381  CGGTTTCAGA  TTCCATGGCC  CTGAGAGGTC  TAAGAGACAC  AGATGATGAG  GATACGGCTG
1441  TGACCGAAGA  ACGCAGTGGT  GCTCTGTTAC  TTGCACCAA  CTCTTACAA  ACTGATGAGG
1501  GATTGAGCTT  AAGAGGTCGG  AGAGACTCGG  GATCGTCTAC  ACAGGAGAGG  TATGTGGAAC
1561  TCAGCCTATT  TCTGGAAGCT  GAGAACTAA  a  stcgccaaag  gctgtttcta  tttggctttt
1621  ggcaatyta  agattcctgg  tgaacaagc  agagagagag  ggataaagag  ttttaagtatg
1681  agaatatgtt  tgcgcaaaaa  aagycataat  ttcagttttg  tggcaaaagac  actttgactg
1741  taaaggagg  rttfaagggg  tttactcttg  tgagggtttg  ttgtttgaaa  tgttttctgc
1801  ttgatggatc  atatttttgt  acctttatta  tgtgatcaat  tttgatttag  aaaaaaaaaa
1861  aaaaaacbat  agccytgaac  atyagcatga  cttfaaaaga  taaatcagcc  ttttaacctc
1921  tattcttttg  actcatgaac  atyagacttc  ataagaaat  tagaqaatt  gtaccaagca
1981  aaacagccat  atagtgttct  aaacttccat  gtcaattoga  octayacaaa  tacacttatg
2041  acctcagaaa  atttgacata  attttaatat  ttaaccaagt  ttgtcaaga

```

Sequences of 5' leader, 3' trailer, and introns (when applicable) are printed in lowercase.

FIGURE 4 (contin.)

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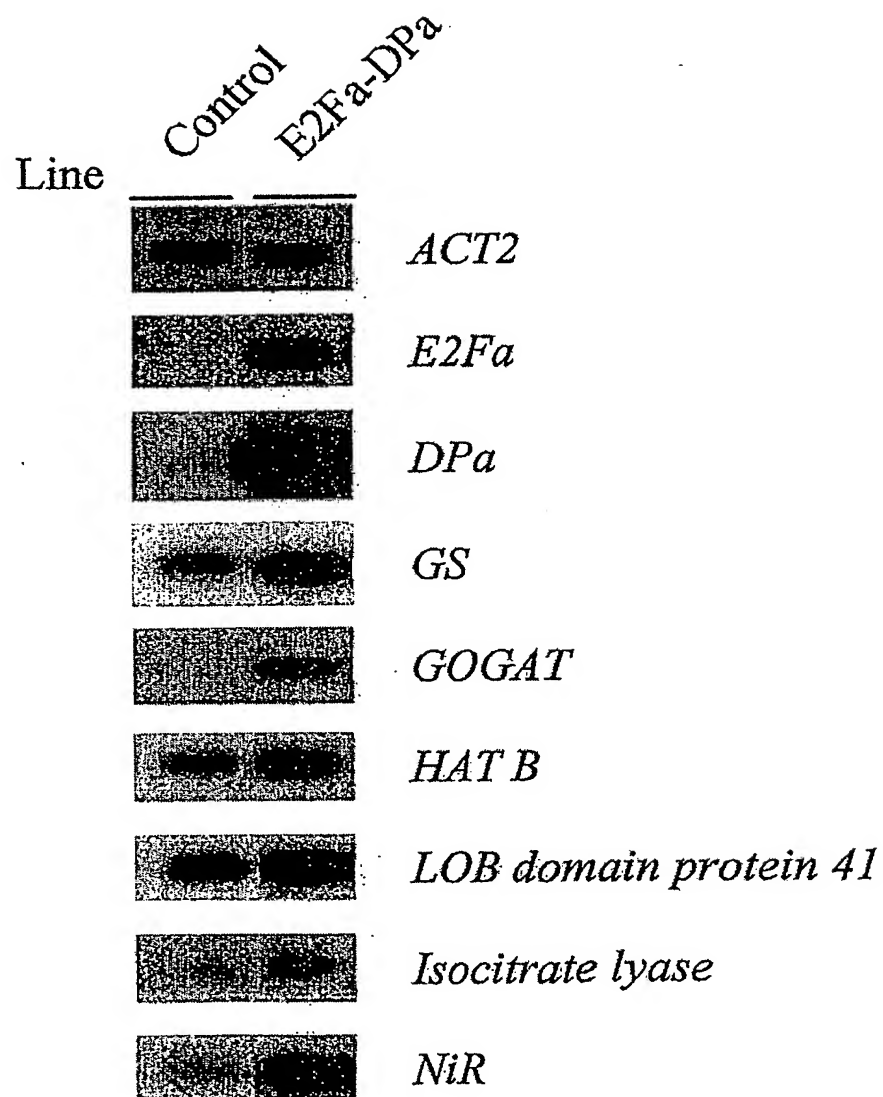


FIGURE 5

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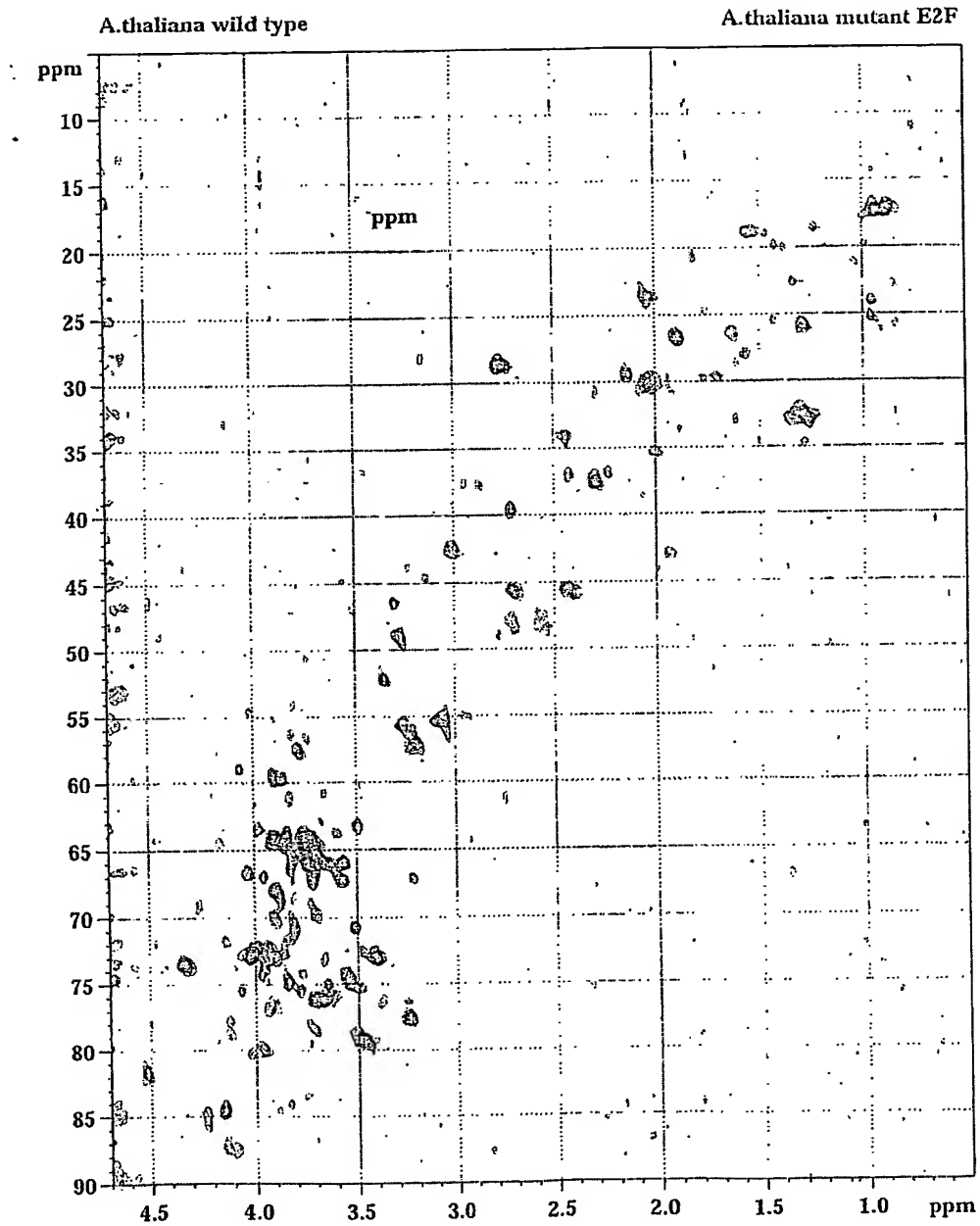


FIGURE 6

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